

ABSTRACT OF THE DISCLOSURE

Automatic power control (APC) is provided by a) a variable output voltage differential receiver/driver, which receiver is responsive to data signals for generating a voltage, the laser driver output voltage amplitude being controlled by a first potentiometer on an integrated circuit generating an AC current signal for summing with a DC current signal to provide a laser drive current signal to b) a laser transmitter having a laser diode, said laser diode for producing optical power over an optical transfer medium and a photodiode for producing a feedback signal in response to said optical power, the APC including c) a power stabilizing circuit including an error amplifier, a second potentiometer and a bias current drive transistor, the error amplifier having inputs for both the feedback signal and a voltage reference to generate an output control signal, the second potentiometer affecting said output control signal, and said bias current drive transistor being responsive to said output control signal for supplying bias current to the laser diode. According to another aspect of the invention, one or more of the potentiometers, error amplifier or voltage reference are included on said integrated circuit.